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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/581,314

07/07/2006

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EXAMINER

LONG, ROBERT FRANKLIN

ART UNIT

PAPER NUMBER

3721

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/581,314

Applicant(s)

LIMMA ET AL.

Examiner

Robert F. Long

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 26 May 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 33-64 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 33-64 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No.(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No.(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 05/26/10 has been entered.

The amended specification and new drawing(s) are noted and accepted.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

**Claims 33-64** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Mault et al. (US 20030065257 A1) in view of the parent application Mault et al. (US 6513532 B2).**

**Regarding claims 33, 47, 56, and 64,** Mault et al. teaches a measurement device (90), system (84) and a method for transmitting measured sports activity information (**communication of user activity to body activity monitor 124**) and providing at least one individual with feedback based on the measured sports activity information, (display 112) wherein the method comprises:

measuring sports activity information with a measurement device comprising a plurality of measuring elements configured to measure a plurality of quantities relating to a sports activity; (**sensors, 138/140, monitor 120, position discriminator 122, and monitor 124, [0047], fig. 6**)

connected to a processing unit, (**CPU 88 fig. 4**); transmitter (82) transmitting, with the measurement device,

a memory (92) configured to store at least one definition, based on which a predefined set of pieces of sports activity information is selected from the received sports activity information;

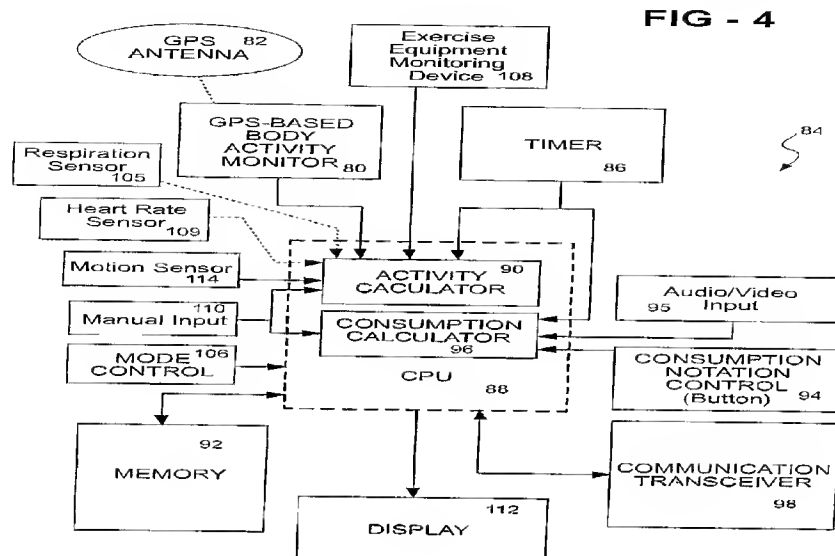
a second memory (86, [0039] configured to store at least one definition based on which a predefined set of pieces of sports activity information is selected from the received sports activity information, and a second processor (90), configured to select the predefined set of pieces of sports activity information from the received sports activity

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information based on the at least one definition, which is defined based on the sport in question, stored on the second memory, [0038-0045]);

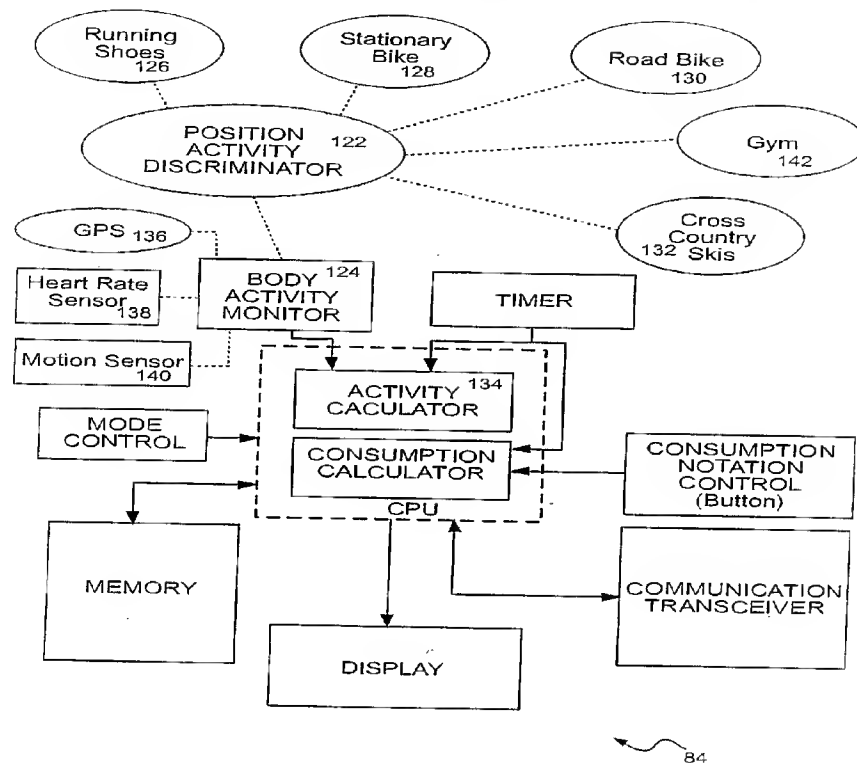
wherein the measured sports activity information to a receiving device via a short-range wireless radio communication link during the activity (**98 [0039]**); (**bike, ski, run, and** etc. [0047]) which is subject to a selection by a receiving device based on the sport in question, to at least one receiving device via a short-range wireless radio communication link during the sports activity according to a communication protocol, (**communication transceiver 98 links data to a local computing device [0039]**); at least one feedback device (**wristband/watch 14, PDA 24, graphical output 110 – figure 5**) configured to provide at least one individual with feedback on a user interface display based on the selected sports activity information, [0037-0040].

See figure 4 below showing CPU 88 analyzing monitored body activity -



Mault shows different sports or the sport in question to be analyzed fig 6-

FIG - 6



Mault et al. fails to teach selecting, based on the sport in question, from the received sports activity information a predefined set of pieces of sports activity information with the receiving device.

However, in Mault's parent application **Mault et al. (US 6513532 B2)**, Mault et al. uses equations to determine the relationship between activity levels and calorie expenditure, explains that activity level can be identified using charting signal output,

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and that heart rate correlates with body activity and expenditure (column 17, lines 32-43). In column 19, lines 33-35, Mault teaches determines calories expended via activity levels by compiling measurements from accelerometers, heart rate monitors, and processing the signals into different activity levels (running vs. walking). Using the activity levels an estimate of calorie expenditure is determined. Mault's computer system (monitoring device 10/wristband 14 with display 16) sums calorie expenditure data with calorie consumption data, and outputs caloric balance for a given time period. Caloric expenditure data is calculated by the equation  $TEE = AEE + REE$ , where total energy expenditure (TEE) is the sum of resting energy expenditure (REE, a product of resting metabolic rate and the time-period of interest) and activity related energy expenditure (AEE), see column 1, line 67 and column 2 lines 1-2; see column 17, lines 15-54, and column 19, lines 4-7, see also column 19, lines 7-36 and incorporation by reference of US application 09/685,625 now US patent number 6,478,736 B1 figure 8B).

Given the teachings of Mault's parent application (**US 6513532 B2**), of calculating resting and activity energy expenditure as well as signals into different activity levels (running vs. walking), it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Mault's continued application (**US 20030065257 A1**) in view of the parent (**US 6513532 B2**), with having the calculation of energy expenditure to include a predefined set of pieces of sports activity information with the receiving device in order to determine caloric balance for a given period during a particular activity and/or predefined set of pieces of sports.



**Regarding claims 34-46, 48-49, 51-55, and 57-63,** Mault et al. teaches a measurement device (90), system (84) can be carried (**wristband/watch 14, PDA 24, can be carried**]) and a method for transmitting measured sports activity information (**bike, ski, run, and** etc. [0047) and providing at least one individual with feedback based on the measured sports activity information, (**feedback display 100, fig. 5**) with having feedback indicators to send and receive data (**sensors, 138/140, monitor 120, position discriminator 122, and monitor 124, [0047], fig. 6**); calculating sport activity parameters, (**activity calculations [0035]**), communication protocol (**communication transceiver 98 links data to a local computing device [0039]**) memory storage, (**86/92**) audio voice [0034, 0058], GPS, [82], pulse coil to measure heart rate, (sensor 78, [0036]), measuring time, (see time out put graph fig. 5), wherein the processor is configured to calculate at least one additional piece of sports activity information based on the measured sports activity information (**consumption calculator 98**); and the transmitter (**input/output port 106 transmits data**) is configured to transmit the calculated sports activity information via a communication link, (**activity sport data is transferred from activity calculator (90 or 134) to a local computing device [0033, 0039-0044]**).

Mault (**US 20030065257 A1**) continued application in view of Mault's parent application (**US 6513532 B2**) fails to teach having a thermometer, barometer, and altitude.

It would have been obvious to one skilled in the art at the time the invention was made to modify Mault's continued application (**US 20030065257 A1**) in view of Mault's

parent application (**US 6513532 B2**) with having a thermometer, barometer, and altitude as an additional analysis of measurement and feedback to the heart rate, calorie consumption with the GPS measuring for having a more accurate performance calculation and/or additional feedback output to be displayed. Measuring and displaying one's activity while exercising and performing a sport activity is a standard well known convention of fitness equipment and navigation equipment is also conventional and the GPS system of Mault et al (which tells location and altitude) would motivate one skilled in the art with having a thermometer, barometer, and altitude for the additional feedback output analysis during sport activities such as hiking.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure – **Orr et al. (US 20040198554 A1)** – portable monitor (10)  
*Encoded metabolic data for transfer while using different exercise apparatuses.*

### ***Response to Arguments***

Applicant's arguments with respect to claims 33-64 have been considered but are moot in view of the new ground(s) of rejection.

Examiner notes that claims 41, 44, and 48, might be allowable if rewritten in independent form including all of the limitations of the base claim and/or rewritten to be tied into a more particular method such as the method for providing feedback to a sailor (figure 3, display 34) as disclosed in the specification on (specification page 12) and any

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intervening claims. Also corrective action is required to overcome the 35 USC 101 rejection(s). Examiner also encourages applicant to call at the number listed below for further discussion of the application and is available for support Monday-Friday (8:30-6).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert F. Long whose telephone number is (571)270-3864. The examiner can normally be reached on Monday-Friday (7:30-5).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, LoAn Thanh can be reached on (571) 272-4966. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Robert F Long/  
Examiner, Art Unit 3764

/LoAn H. Thanh/  
Supervisory Patent Examiner, Art Unit 3764